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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/711,238 | 09/03/2004 | Jonathan D. Albert | H-427 | 5237 |

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DAVID J COLE
E INK CORPORATION
733 CONCORD AVE
CAMBRIDGE, MA 02138-1002

| EXAMINER | |
|---|---|
| LIANG, REGINA | |
| **ART UNIT** | **PAPER NUMBER** |
| 2629 | |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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| 3 MONTHS | 03/23/2007 | PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/711,238 | ALBERT ET AL. | |
| | Examiner | Art Unit | |
| | Regina Liang | 2629 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *09 January 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/9/07 has been entered. Claims 1-20 are pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear as to "an receiving surface electrode" (line 4) since it is clear is this electrode the same as the electrode in "proving a receiving surface comprising at least one electrode" (recited in claim 10) or not.

***Claim Rejections - 35 USC § 102***

5. Claims 1-4, 10, 12, 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazan (US 3,825,791).

As to claim 1, Fig. 1 of Kazan discloses an electrically active display comprising: an optoelectrically active display medium (electroluminescent phosphor output display medium 31), an optically transmissive electrode (transparent conductive layer 35) in contact with the first surface of the display medium, an adhesive layer (col. 5, lines 18-25) disposed on the second surface of the display medium, the surface of the adhesive remote from the display medium forming an external surface of the display, so that the display can be attached to a receiving surface by the adhesive (tube faceplate is a receiving surface).

As to claims 2, 12, Kazan teaches an optically transmissive layer (output layer 33).

As to claims 3, 4, Kazan teaches the electrode comprises a metal oxide or indium tin oxide (col. 5, lines 6-10).

As to claims 10, 20 are product by process claims, Kazan teaches the display product as claimed, note the discussion of claim 1 above. Therefore, claims 10 and 20 are met by Kazan, see M.P.E.P. 2113.

***Claim Rejections - 35 USC § 103***

6. Claims 1-4, 10, 12, 16, 18, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild et al (US. 5,802,015 hereinafter Rothschild) in view of Sato et al (US 5,173,342 hereinafter Sato).

As to claim 1, Rothschild discloses an electrically active display comprising: an optoelectrically active display medium (the output device 14 is a TN liquid crystal display, col.

11, line 67), an adhesive layer (18) disposed on the second surface of the display medium, the surface of the adhesive remote from the display medium forming an external surface of the display, so that the display can be attached to a receiving surface by the adhesive (Fig. 2, the bottle 11 is a receiving surface).

Rothschild does not explicitly disclose the display medium comprising an optically transmissive electrode in contact with the first surface of the display medium. However, Sato is cited to teach a TN liquid crystal display device having an optically transimissive electrode (2) in contact with the first surface of the display medium (1) as is well known in the art. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rothschild to comprise an optically transimissive electrode (2) in contact with the first surface of the display medium in order to apply voltages to the electrodes of the display for generating the display image.

Claims 10 and 20 are product by process claims, the combination of Rothschild and Sato teaches the display product as claimed, note the discussion of claim 1 above. Therefore, claims 10 and 20 are obvious over the combination of Rothschild and Sato, see M.P.E.P. 2113.

As to 18, note the discussion of claim 1 above. The top electrode 2 of Sato corresponds to the first electrode; the bottom electrode 2 of Sato corresponds to the second electrode. The combination of Rothschild and Sato would have the second electrode (2 in Sato) between the display medium and the adhesive layer (18 in Fig. 2 of Rothschild).

As to claims 2, 12, Sato teaches an optically transmissive layer (top substrate 3).

As to claims 3, 4, Sato teaches the electrode 2 comprises a metal oxide or indium tin oxide (col. 2, lines 27-28).

As to claim 16, the bottom electrode 2 of Sato corresponds to the rear electrode. The combination of Rothschild and Sato would have the rear electrode (2 in Sato) between the display medium and the adhesive layer (18 in Fig. 2 of Rothschild).

7. Claims 5, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild and Sato as applied to claims 1 and 10 above, and further in view of Richley (US 5,900,858).

Rothschild as modified by Sato does not disclose the display medium comprising bichromal microspheres. However, Richly teaches a panel display with utilizes a plurality of bichromal ball. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display device of Rothschild as modified by Sato to have the bichromal microspheres display medium as taught by richly so as to provide a flexible display device which has memory capabilities (col. 1, lines 12-17 of Richley).

8. Claims 6, 7, 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild and Sato as applied to claims 1 and 10 above, and further in view of Sheridon (US 4,126,854).

Rothschild as modified by Sato does not disclose the display medium comprising an encapsulated electrophoretic medium. However, Sheridon teaches a panel display device comprising an encapsulated electrophoretic medium (col. 2, lines 22-25). Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display panel of Rothschild as modified by Sato to have encapsulated electrophoretic display

medium as taught by Sheridon so as to provide a flexible display device which has memory capabilities (last two lines in the abstract of Sheridon).

9. Claims 8, 9, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothschild and Sato as applied to claims 1 and 10 above, and further in view of Brody (US 6,285,343).

As to claim 8 and 11, Rothschild as modified by Sato does not disclose at least one conductive extending from the electrode through the display medium. However, Brody teaches a panel display device having an extending electrode (interconnecting conductor 30 in Fig. 4a) extending from one side of the display to an opposite side of the display with the drive circuit on opposite side of the display. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display panel of Rothschild as modified by Sato to have an interconnecting conductor as taught by Brody such that electrically connecting the drive circuit adjacent the second surface with the electrode along the first surface.

As to claim 9, Fig. 4c of Brody teaches at least one contact pad (19) connected tot eh connecting conductor 30.

10. Claims 1, 10, 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsubara et al (US 5,065,505 hereinafter Matsubara) in view of Iwashita et al (US 4,715,686 hereinafter Iwashita).

As to claims 1, 16, 18, Fig. 1 of Matsubara discloses an electrically active display comprising an optoelectrically active display medium (LCD) having a surface (the top surface of

LCD corresponds to a second surface of the display medium), an adhesive layer (5, 8a) disposed on the surface of the display medium, at least one electrode (7) disposed between the display medium and the adhesive layer.

Matsubara does not explicitly disclose the display medium (LCD) having a surface and an electrode in contact with the first surface of the display medium. However, Fig. 1 of Iwashita teaches a LCD display (3, 11) having a first surface (lower surface of 4) and a second surface (top surface of 4), and an optically transmissive electrode (3) in contact with the first surface. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the display medium of Matsubara having a surface and an electrode in contact with the first surface as taught by Iwashita so as to provide a display picture (pixel) on the LCD display medium.

As to claims 17, 19, Matsubara teaches the portion of the adhesive layer (5, 8a) covering the at least one electrode 7) is conductive (col. 3, lines 17-19).

Claims 10 and 20 are product by process claims; the combination of Matsubara and Iwashita teaches the display product as claimed, note the discussion of claims 1 and 18 above. Therefore, claims 10 and 20 are obvious over the combination of Matsubara and Iwashita, see M.P.E.P. 2113.

***Response to Arguments***

11. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's remarks regarding the combination of Greanias and Blanchard are not persuasive in view of the new ground of rejection.

Applicant's argument on page 7-8 that Matsubara does not describe an adhesive layer disposed on the second surface of the display medium, are not persuasive. Matsubara is using an adhesive layer (8a) including conductive particles (5) for providing electrical interconnection between the electrode (7) on the LCD display (4) and the electrode (6) of the circuit board (2). Fig. 1 of Matsubara shows that the electrode (7) is provided on top of the LCD (display medium).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Regina Liang whose telephone number is (571) 272-7693. The examiner can normally be reached on Monday-Friday from 8AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe, can be reached on (571) 272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Regina Liang
Primary Examiner
Art Unit 2674

3/13/07